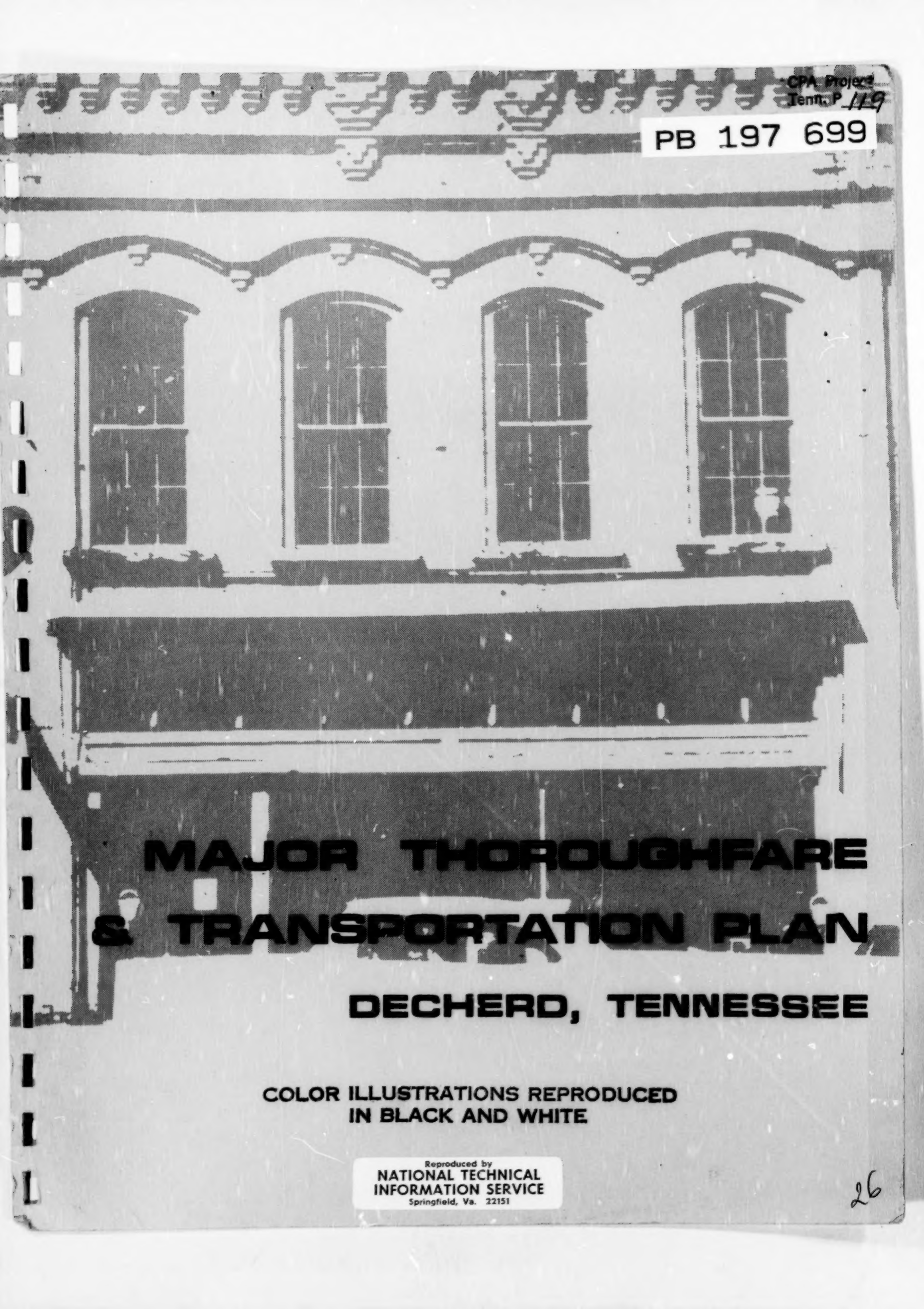


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MAJOR THOROUGHFARE & TRANSPORTATION PLAN

DECHERD, TENNESSEE

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ABSTRACT

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Abstract : The Decherd Major Thoroughfare and Transportation Plan was developed to provide adequate facilities to satisfy the present and future local transportation needs.

The report contains an inventory and analysis of the existing major thoroughfares and other transportation facilities within or serving the City of Decherd. The data for this analysis was obtained from field surveys, the Tennessee Highway Department and local governmental sources. This study also includes projections of future transportation requirements to 1990 based on future population and economic growth.

The Plan was developed by applying transportation planning standards to results of the analysis. It contains recommendations for the improvement and expansion of the existing thoroughfare system to adequately and conveniently accommodate the existing and anticipated future traffic.

**MAJOR THOROUGHFARE
AND TRANSPORTATION PLAN
Decherd, Tennessee**

**Prepared under contract with the
TENNESSEE STATE PLANNING COMMISSION**

by

**Sanders and Associates
Consulting Planners, Architects and Engineers**

for

Decherd, Tennessee

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Tenn. P-119

February, 1970

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Introduction

The purpose of this study is to develop a plan for Decherd's transportation system that will satisfy the City's present and future transportation needs, thus assuring the continued life and growth of Decherd.

Scope

This Plan considers all of Decherd's transportation system--primarily thoroughfares and a railroad. However, the major emphasis of the Decherd Transportation Plan is on the local major and secondary thoroughfares.

The three types of roads and streets included in this study are:

- (1) Arterials, which carry large volumes of both local and through traffic, often having partial access control;
- (2) Collectors, which collect local traffic between arterials;
and
- (3) Local streets, which provide direct access to individual properties and are low-volume, low-speed, short-distance traffic carriers connecting with the collector streets.

Method of Study

The first step in preparing the Major Thoroughfare and Transportation Plan was a detailed analysis of Decherd's existing transportation system to determine any present deficiencies. The data for this analysis was derived from an extensive field survey of the City streets, the Tennessee State Highway Department and local governmental sources. The second step was the projection of future transportation requirements for Decherd based on the Future Land Use Plan and projections of future population and economic growth. Next, the Major Thoroughfare Plan was developed by applying transportation planning standards to the data obtained in the previous steps. The Plan contains recommendations for the improvement and expansion of the existing thoroughfare system to adequately and conveniently accommodate the existing and anticipated future traffic. Finally, the report considers methods of implementing the recommendations of the Major Thoroughfare Plan.

Inventory and Analysis of Existing Thoroughfares

Decherd's existing thoroughfares, shown on Plate 1, include one federal route, two state routes and two county routes.

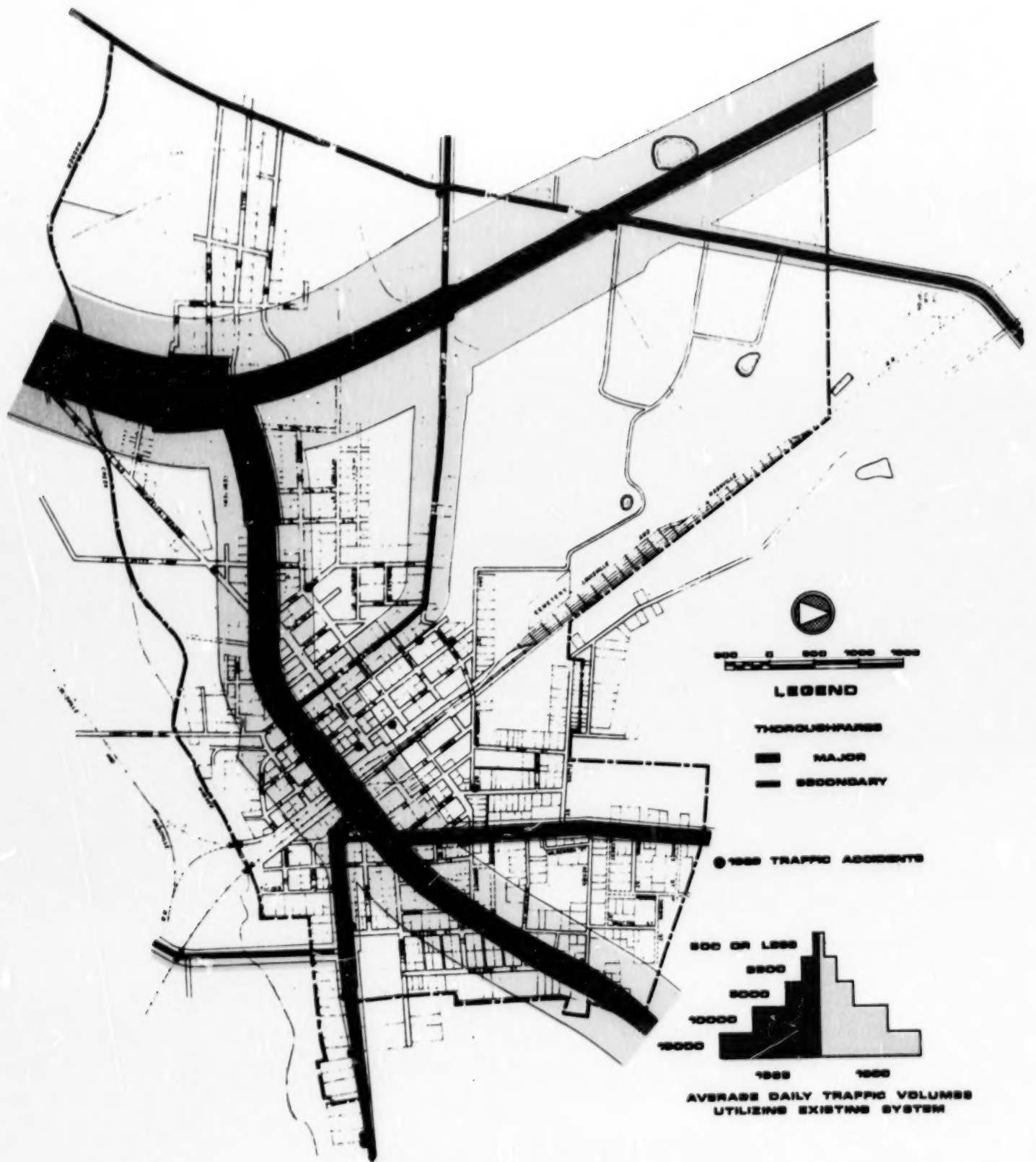
Decherd's principal arterials are: (1) U. S. Highway 41A, which is the primary route from Decherd to Tullahoma; and (2) Tennessee Route 127, which connects to U. S. 41A in the northwestern portion of Decherd, and provides direct access to the north and to the Hillsboro community. The minor arterial is Tennessee Route 50, which is the primary connector between Decherd and I-75.

The collectors on the east of the Louisville and Nashville Railroad are Spring Street, Diagonal Street and Morris Ferry Pike, which are parts of County Route 4405. To the west of the railroad tracks the collectors include North Fourth Street and West Cumberland Street (County Route 4243).

Street Characteristics

Table 1 summarizes the characteristics of Decherd's thoroughfares, including right-of-way and pavement widths and condition. The recommended minimum right-of-way standards for arterials are 80 feet for improvements of existing streets and 100 feet for new construction. All of Decherd's arterials meet these criteria, except the portion of East Main Street between Bennett Street and the City limits. However, none of Decherd's collectors meet the recommended right-of-way standard of 60 feet.

The recommended minimum pavement width is 24 feet without curb parking. All of Decherd's arterials meet this criteria, and only two collectors-- West Cumberland Street and North First Avenue--are below this standard. If curb parking is allowed, the minimum standard should be increased by 8 feet for each lane of parking. Curb parking is allowed on many of Decherd's thoroughfares. The pavement widths of the collectors are adequate according to this standard, but the pavement widths of the collectors are inadequate.



EXISTING THOROUGHFARES **DECHERD, TENNESSEE**

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Table 1
INVENTORY OF EXISTING THOROUGHFARES
Decherd, Tennessee
1969

Thoroughfare	Type	Location	Right-of-Way Width (Feet)	Pavement Width (Feet)	Traffic Lanes	On-Street Parking	Pavement Condition
Decherd Boulevard (U. S. 41A & Tennessee 16)	PA	From S. city limits to Main St.	100	62	4	Parallel	good
Decherd Boulevard	PA	From Main St. to N. city limits	100	42	2	Parallel	good
West Main Street (Tennessee 50)	MA	From Decherd Blvd. to Ninth St.	80	56	4	Parallel	fair
West Main Street (Tennessee 50)	MA	From Ninth St. to Railroad	80	60	4	Parallel	(requires patching) fair
East Main Street (Tennessee 50)	MA	From Railroad to Bennett St.	80	60	4	Diagonal & Parallel	(requires patching) fair
East Main Street (Tennessee 50)	MA	From Bennett St. to N.E. city limits	60	40	2	Parallel	(requires patching) fair
W. Cumberland St.	C	From Decherd Blvd. to N. Fourth Ave.	40	22	2	Parallel	(requires patching) good
North Fourth Ave.	C	From W. Cumber- land St. to W. Main St.	40	22	2	Parallel	good
Morris Ferry Pike	C	From N. city limit to Market St.	40	24	2	Parallel	good
Diagonal Street	C	From N. city limits to E. Main St.	40	24	2	Parallel	good
Diagonal Street	C	From E. Main St. to Spring St.	40	26	2	Parallel	good
North Front St.	C	From E. Main St. to Spring St.	50	30	2	Parallel	good
Spring Street	C	From Diagonal St. to E. city limits	40	26	2	Parallel	good
Cowan Street	C	From Spring St. to S. city limits	26	16	2	Parallel	good

Source: Tennessee State Highway Department and Sanders and Associates

Legend: PA - Principal Arterial; MA - Minor Arterial; C - Collector

One solution to this problem is to prohibit parking on one or both sides of the inadequate streets, as discussed later in this report in the section on Implementation. The Plan section of the report includes proposals for widening pavements and acquisition of additional rights-of-way, when needed.

Of all Decherd's arterials, Decherd Boulevard and Sharp Spring Road have pavements in good condition which should be adequate until 1980 unless damaged by conditions other than normal vehicular traffic. However, the pavement on East and West Main Streets is presently in fair to poor condition. All of Decherd's collectors have pavement in good condition except West Cumberland Street.

Existing Traffic Volumes

The average daily traffic volumes on Decherd's thoroughfares in 1969 are shown on Plate 1 and listed in Table 2. Traffic volumes vary considerably between thoroughfares and even between different portions of the same thoroughfare. The greatest volume of traffic is on Decherd Boulevard (U. S. 41A and Tennessee 16) from the City's south limits to Main Street. This portion of Decherd Boulevard carries twice as many cars as the portion from Main Street to the north City limits. This variation reflects the extensive amount of travel between Decherd and the adjacent town of Winchester. The second most heavily traveled arterial in Decherd is Main Street, which carries about one-half as much traffic as the most heavily traveled portion of Decherd Boulevard. The most heavily traveled collectors are Diagonal and Spring Streets in central-eastern Decherd.

The practical daily vehicle-carrying capacity of Decherd's thoroughfares was calculated in accordance with the Highway Research Board Special Report No. 87, Capacity Manual, 1965. Table 2 shows a comparison of the practical daily capacities or level of service with the 1969 average daily traffic volumes. All of Decherd's thoroughfares have a practical

Table 2

TRAFFIC VOLUMES*
Decherd, Tennessee
1969

Thoroughfare	Type	Location	Average Daily Traffic		Practical Daily Level of Service of Existing Thoroughfares	
			1969	1990	For existing Land Use	For 1990 Land Use
				For existing Thoroughfares	For existing Land Use	For 1990 Land Use
Decherd Boulevard (U. S. 41A & Tennessee 16)	PA	From S. city limits to Main St.	11,200	22,000	22,000	21,810
Decherd Boulevard (U. S. 41A & Tennessee 16)	PA	From Main St. to N. city limits	6,600	20,200	20,200	13,410
West Main Street (Tennessee 50)	MA	From Decherd Blvd. to Ninth St.	5,800	13,500	13,500	19,480
West Main Street (Tennessee 50)	MA	From Ninth St. to Railroad	6,400	19,900	13,000	21,150
East Main Street (Tennessee 50)	MA	From Railroad to Bennett St.	5,700	21,500	13,000	21,150
East Main Street (Tennessee 50)	MA	From Bennett St. to N. E. city limits	2,600	21,500	14,200	18,800
W. Cumberland St.	C	From Decherd Blvd. to N. Fourth Ave.	840	11,400	11,400	5,610
North Fourth Ave.	C	From W. Cumberland St. to W. Main St.	470	8,900	300	5,610
Morris Ferry Pike	C	From N. city limits to Market St.	780	2,500	2,500	10,400
Diagonal Street	C	From N. city limits to E. Main St.	1,140	3,200	3,200	6,120
Diagonal Street	C	From E. Main St. to Spring St.	550	1,500	1,500	6,630
North Front St.	C	From E. Main St. to Spring St.	1,060	2,200	2,200	7,650
Spring Street	C	From Diagonal St. to E. city limits	930	3,700	3,700	11,270
Cowan Street	C	From Spring St. to S. city limits	420	2,200	2,200	1,500

Source: Tennessee State Highway Department and Sanders and Associates.

* Average Daily Traffic Volume shown is for the most heavily travelled segment of each street.
Peak hour traffic is assumed to be 10 percent of average daily traffic.

capacity far in excess of their present traffic volumes. The capacity of the most heavily traveled thoroughfare, Decherd Boulevard, is almost two times greater than its current traffic volume. This ratio of excess capacity is even greater for the other thoroughfares.

Accident Analysis

The distribution of traffic accidents throughout Decherd during 1969 is shown on Plate 1. More than 70 percent of the traffic accidents occurred on arterials and collectors. There were two areas with significant concentrations of accidents. Six accidents occurred near the intersection of Main Street, a minor arterial and Front Street, a collector. At present, parallel curb parking is permitted to within approximately 25 feet of this intersection on both streets. Parking should be prohibited for 50 feet from the intersection on both streets to improve the sight distance and decrease the accident rate. There were also six accidents in the immediate vicinity of the intersection of Decherd Boulevard, a principal arterial, and Main Street, a minor arterial. This is the most heavily traveled intersection in Decherd. A signal should be installed to control traffic and reduce the accident rate.

While the present number of traffic accidents in Decherd is not excessive, they are occurring on streets which are presently carrying only slightly more than one-third of their practical traffic capacity. As local traffic volumes increase to the practical capacity of these streets, better traffic control will be required to prevent a large increase in the accident rate.

Traffic Control Devices

Traffic control signals must be carefully placed and timed for effective and efficient results. Decherd has one pretimed signal at the intersection of East Main Street and Diagonal Street in the Central Business District. Another signal should be installed at the intersection of Decherd Boulevard and Main Street as recommended in the preceeding section. This one signal, the two-way and four-way stop signs, the yield signs and caution signs are also used to control traffic in Decherd.

State-wide standards have been established for the proper application of signals and signs to control traffic. These are set forth in the State of Tennessee, Manual on Uniform Traffic Control Devices for Streets and Highways. Traffic control in Decherd should conform to these standards.

Barriers to Vehicular Circulation

The major barrier to local vehicular circulation is the Louisville and Nashville Railroad, which interrupts circulation between eastern and western Decherd. There are only two places where vehicles can cross--grade crossings at Cumberland Street and Main Street.

Poor alignment, inadequate street patterns and street jogs also restrict vehicular circulation in Decherd. This is especially important on Cumberland Street since it is one of only two streets which cross the railroad. The location of Cumberland Street is shown on Plate 1. Two factors now prevent this street from being used as a secondary thoroughfare connecting the eastern and western portions of Decherd: (1) a 90 degree jog between South Third Street and South Fourth Street; and (2) the termination of East Cumberland Street at Horton Street.

Future Traffic Volumes

Decherd's future traffic volumes have been projected on the basis of the Land Use Plan for 1990 and anticipated growth and new highway construction in the surrounding region.

The Land Use Plan projects a 163 percent increase in commercial land use and a 712 percent increase in industrial land use during the next twenty years. Together, these uses will produce a fourfold increase in commercial and industrial traffic by 1990. The internal trips generated by the projected residential growth should account for about 35 percent of the commercial and industrial trips. Therefore, approximately 65 percent of the shoppers and industrial workers in Decherd will come from outside the urbanizing area by external-internal traffic.

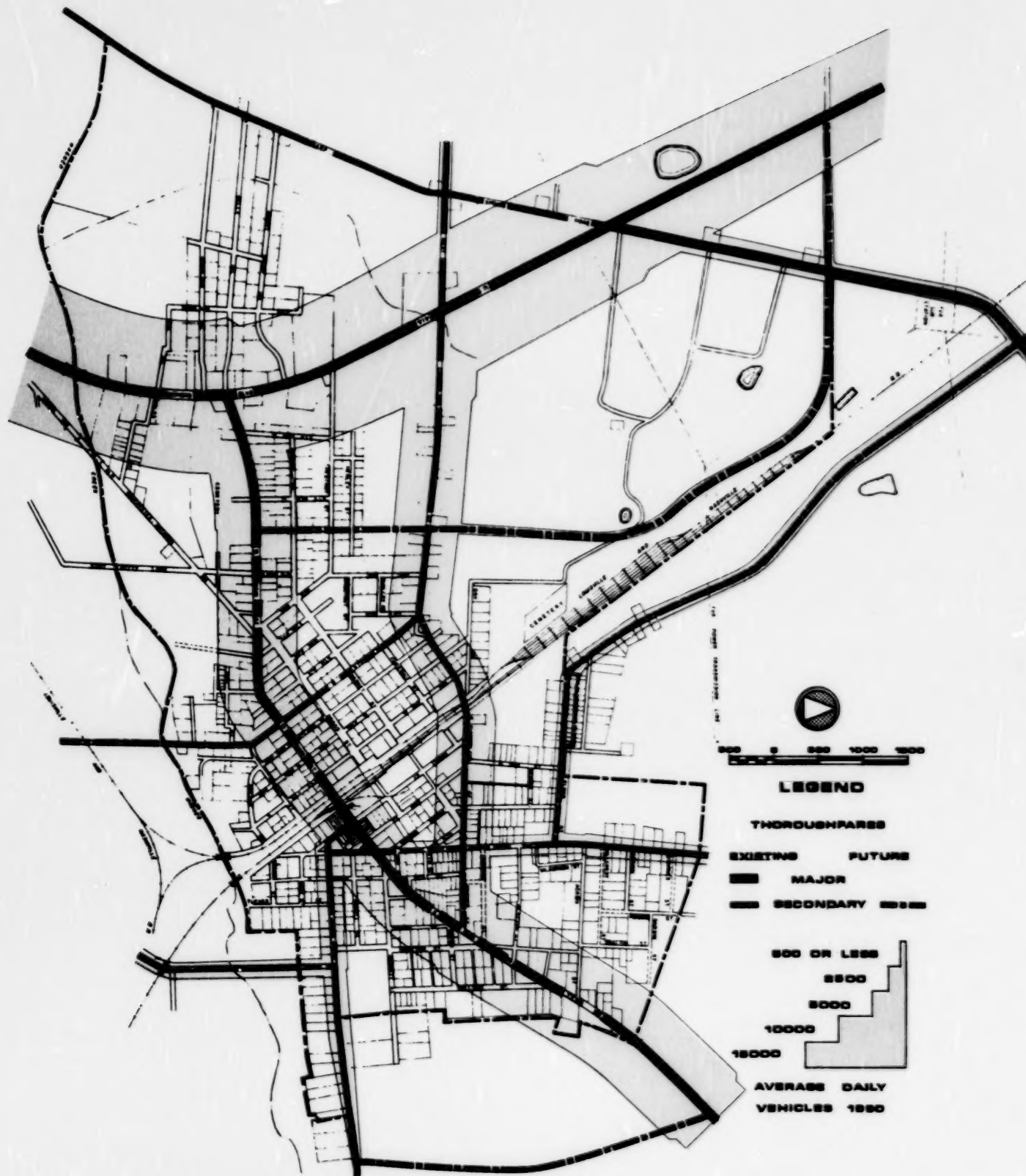
Increases in external-internal traffic during the next twenty years will result from two factors in addition to normal regional growth: (1) the continued expansion of the Arnold Engineering and Development Center, eight miles north of Decherd; and (2) the combined effects of the completion of Interstate 24 northeast of Decherd and the proposed Tim's Ford Reservoir southwest of the City. It is projected that regional traffic to the Tim's Ford Reservoir will exit from Interstate 24 onto Tennessee 50 and travel through Decherd via Main Street and the proposed Cumberland Street minor arterial on their way to the reservoir area.

The projected traffic volumes for 1990 are shown on Plate 1 as they would occur if distributed on the existing thoroughfares. Table 2 shows a comparison between the practical capacities of these streets and the 1990 traffic projected for both the existing thoroughfare system and the proposed Major Thoroughfare Plan. Most of the existing major and secondary thoroughfares have adequate capacity for the 1990 traffic volumes in their role as part of the proposed Major Thoroughfare Plan. However, there are two streets which will need to be widened: (1) Decherd Boulevard (U. S. 41A and Tennessee 16) from Main Street northward past the City limits; and (2) West Cumberland Street. Plate 2 shows the projected traffic volumes for 1990 distributed on the proposed thoroughfare system.

Railroad

The Louisville and Nashville Railroad provides railroad service for Decherd. Passenger service was discontinued two years ago. The railroad is not currently planning to provide any local passenger service.

Freight service in Decherd is provided by two trains which stop once a day--one northbound and the other southbound. In addition, there are four northbound through-freight trains and six southbound through-freights which do not stop in the City. As freight demand grows in Decherd, some of these through trains could be scheduled for additional stops in the City if necessary. Freight service has been at the present level for the past eight



MAJOR THOROUGHFARE PLAN

DECHERD, TENNESSEE

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years, and the railroad apparently does not have any immediate plans to expand this service in Decherd.

Bus Service

There is no external or internal bus service in Decherd. At present, the Greyhound Company provides service from a bus stop located in Winchester.

A central bus depot should continue to serve both communities. However, a new station is badly needed in order to adequately accommodate the local bus service demands.

Thoroughfare Dimension Standards

The following table summarizes the planning standards for the three basic types of streets included in Decherd's Major Thoroughfare Plan.

Table 3
RECOMMENDED DESIRABLE STREET STANDARDS

	<u>Right-of-Way Width</u>	<u>Pavement Width</u>	<u>Number Lanes</u>	<u>Lane Width</u>
Arterials				
(Improvement of Existing)	80	52	4	12
(New)	100	52	4	12
Collectors	60	40	2	12
Local Streets	50	32	2	12

Source: Sanders and Associates

Arterials

Of the three types of streets in Decherd, arterials carry the greatest volume of traffic. They provide direct access to and through the City from the surrounding areas and also receive traffic which is collected by the

collectors from the local streets. In planning the improvement of the existing arterials, the right-of-way should be at least 80 feet and the pavement width should include four 12 foot lanes for moving traffic and an 8 foot lane for each side if the street on which parking is permitted. However, in cases where the available right-of-way is insufficient, 10 or 11 foot travel lanes may be necessary and parking may be prohibited.

In planning new arterials, the right-of-way should be 100 feet wide and the four-lane pavement width should be 52 feet. Methods which are available to increase the capacity of arterials include the provision of a median strip, synchronized signals, the provision of left-hand turn lanes at intersections, various turn controls or even the prohibition of left-hand turns, the prohibition of parking, and the setting of traffic signals to give more green time to the major thoroughfares.

Collectors

Collectors collect traffic from local streets and channel it to the arterials. In many cases, they also provide direct access to fronting properties. The recommended right-of-way width for collectors is 60 feet. The width of pavement provided should include two 12 foot lanes for moving traffic, and an 8 foot lane for each side of the street on which curb parking is permitted. This results in a recommended pavement width of 40 feet with parallel parking on both sides of the street, or 24 feet with no parking.

Local Streets

Local streets provide direct access to properties and connect to the collector streets. They are used by a relatively low volume of traffic for short distances and at low speeds. Few commercial vehicles use local streets because they are not through-traffic routes. While these streets comprise the largest percentage of the total street mileage in Decherd, they account for only a small proportion of the total vehicle travel miles.

Thoroughfare Capacity Standards

The most important factor in determining the capacity of a street is the width of its cross section, since the number of lanes largely determines the volume of traffic which can be accommodated. Other factors also influence the capacity such as the design speed of the road, signalization, traffic regulations and curb parking. Thus, a given number of lanes can accommodate a range of traffic volumes depending on various combinations of these factors.

The capacity ranges for the various types of streets in the Decherd Major Thoroughfare Plan are presented in Table 4. They were determined in accordance with the Highway Research Board Special Report No. 87, Capacity Manual, 1965 and the Standards for Street Facilities and Services by the National Committee on Urban Transportation. These capacity standards have been based on certain characteristics of Decherd's vehicular traffic. The peak-hour traffic flow is approximately 10 percent of the total average daily traffic, and 60 to 65 percent of the peak-hour traffic flows in the direction of the predominant travel. In addition, truck traffic comprises less than 10 percent of the flow, and 20 percent of the traffic flow would consist of turning movements. Finally, it was assumed that traffic signals would be green 50 percent of the time.

As shown in Table 4, the practical hourly vehicular capacity of a two-lane secondary thoroughfare with curb parking and two-way traffic is 600 to 750 vehicles per hour for an average daily traffic volume of 6,500 to 7,500 vehicles. The efficiency of this street can be increased by limiting it to one-way traffic flow which increases the practical hourly capacity to 900 - 1,100 vehicles for an average daily traffic volume of 9,000 to 12,000 vehicles. Another method of increasing efficiencies is to eliminate curb parking which would increase the hourly volume of the two-way streets by an additional 600 to 750 vehicles. Similarly, on a one-way secondary thoroughfare the elimination of curb parking would increase the hourly capacity by 400-700 vehicles and the average daily capacity to 4,000 - 7,000 vehicles.

The practical capacity of a four-lane major thoroughfare with curb parking ranges from 1,100 to 1,600 vehicles per hour. The efficiency of major thoroughfares can be greatly increased by the application of various special controls such as use of a median strip, synchronization and increasing the green time of traffic signals, turn controls and parking restrictions. As shown in Table 4, this will increase the hourly capacity of a two-way, four-lane major thoroughfare to 1,600 - 2,200 vehicles. The corresponding increase in average daily traffic volume is from 11,000 - 16,000 vehicles on a four-lane urban street with curb parking to 16,000 - 22,000 vehicles per day on a major thoroughfare which is similar except for the addition of these special controls.

Table 4
RECOMMENDED DESIGN CAPACITY STANDARDS

<u>Type Facility</u>	<u>Practical Capacity¹ (Vehicles Per Hour)</u>	<u>Design Capacity¹ (Average Daily Traffic)</u>
2 Lane Urban Street		
2 Way (Curb Parking)	600 - 750	6,000 - 7,500
2 Way (Curb Parking Prohibited)	1,200 - 1,500	12,000 - 15,000
1 Way (Curb Parking)	900 - 1,100	9,000 - 11,000
1 Way (Curb Parking Prohibited)	1,300 - 1,800	13,000 - 18,000
4 Lane Urban Street		
2 Way (Curb Parking)	1,100 - 1,600	11,000 - 16,000
2 Way (Special Controls) ²	1,600 - 2,200	16,000 - 22,000

1 See text for assumptions on which table is based.

2 Special Controls include median, progressive signalization, parking restrictions, turn controls, widening at intersections, or green signal time in excess of 50 percent.

Sources: (1) Highway Capacity Manual, Bureau of Public Roads, U. S. Department of Commerce.

(2) Standards for Street Facilities and Services, National Committee on Urban Transportation.

(3) Interpretation and adjustment to local conditions by Sanders and Associates.

The Plan

The proposed Transportation Plan was developed by applying planning standards to the findings of the transportation inventory and analysis, the projected traffic volumes and local travel patterns. Among the factors considered were the pavement characteristics and vehicular capacities of the existing thoroughfares, the existing traffic volumes, topographical and other barriers to circulation, future land use development, and projected traffic volumes.

Goals

The primary goals of the Major Thoroughfare Plan in providing for the present and future traffic in Decherd are: (1) provision of convenient access, both through and within the Decherd Urbanizing Area; and (2) construction of new thoroughfares to provide access for areas not presently served, thus stimulating development and growth.

Recommendations

The Major Thoroughfare Plan, shown on Plate 2, contains three proposals: (1) improving the existing thoroughfares where necessary so they will be adequate for the projected future traffic volumes; (2) creating additional thoroughfares, both by improving and expanding existing streets and with new construction to provide access and stimulate development; and (3) upgrading local streets where necessary to adequately serve the present and future demands.

Improvement of Existing Thoroughfares. All of Decherd's existing thoroughfares will remain in the Future Major Thoroughfare Plan. The following improvements of existing thoroughfares will be necessary to provide adequate capacity for future traffic:

- (1) The segment of Decherd Boulevard (U. S. 41A and Tennessee 16) from West Main Street to the north City limits should be widened from two lanes to four lanes. This will require increasing the pavement width from 42 feet to 52 feet;

- (2) Cowan Street should be widened from a 16 foot pavement width to a 24 foot pavement width; and
- (3) Main Street should be resurfaced.

New Minor Arterial. The Plan proposes that Cumberland Street be developed as a minor arterial in the future. This new thoroughfare will provide access to the area adjacent to the intersection of Decherd Boulevard and West Cumberland Street which may be developed as the City's major commercial area in the future. The proposed thoroughfare will also receive a portion of the anticipated east-west traffic volume which would otherwise use Main Street. Table 2 shows that the 1990 daily traffic volume on East Main Street would be about 21,500 vehicles if the existing thoroughfare plan were projected for the future. This would be in excess of the practical capacity of this street which is 18,000 vehicles per day. However, the addition of Cumberland Street as a new thoroughfare will reduce the 1990 traffic on East Main Street to approximately 14,200 vehicles per day, which will be within its capacity.

The following improvements and construction will be necessary to develop Cumberland Street as a minor arterial:

- (1) Increase the pavement width of Cumberland Street and Market Street to 40 feet on sections with curb parking and to 30 feet where parking will be prohibited;
- (2) Resurface the existing pavement; and
- (3) Improve the railroad crossing to arterial standards.

New Collectors. The Major Thoroughfare Plan contains four new collectors. These proposed thoroughfares would be created both by the improvement of existing local streets and also by new construction.

- (1) A new collector should be constructed to provide access for future residential development in the north-west quadrant of Decherd. The proposed location, as shown on Plate 2, would align with North Tenth Avenue. The pavement of these streets

should be widened to 30 feet and resurfaced. North Tenth Avenue should also be realigned to eliminate a jog at its intersection with Chestnut Street.

- (2) New construction would be needed to create a collector east of the present City limits to connect Tennessee 50 and Spring Street, as shown on Plate 2. It would provide access for the development of the area east of the City for residential and industrial uses in accordance with the Decherd Land Use Plan.
- (3) Floyd Street should be improved to collector standards serving future industrial development along the Louisville and Nashville Railroad. The Land Use Plan designates this area as the City's major industrial development in the future. When this area is developed, the pavement width of Floyd Street should be increased to 40 feet.
- (4) County Farm Road is proposed as a collector serving future residential development south of Decherd. This street will require an increase in pavement width to 32 feet and resurfacing as the residential uses in this area increase.

Upgrading Local Streets. The pavement on many local streets must be improved in order to adequately accommodate anticipated future traffic. About 30 percent of the local streets in Decherd need minor improvement, while 3 percent require repaving. Another 15 percent, which are presently unpaved, must also be paved. When paving work is done on local streets, the pavement width should also be increased to a minimum standard of 24 feet.

Several other problems affecting Decherd's local streets should also be corrected. There are areas where future development is limited by inadequate local street access. In other areas local streets are spaced too closely, resulting in double frontage lots. Local circulation can also be improved in many areas of the City by the elimination of jogs and realignment of certain streets.

Implementation

The Major Thoroughfare and Transportation Plan which has been developed in this study will do nothing to improve Decherd's transportation system unless its recommendations become reality through proper implementation. The recommended implementation measures and methods of financing are listed as follows:

- (1) Local Leadership;
- (2) Tennessee State Highway Department;
- (3) Gasoline Tax Rebates;
- (4) Bureau of Public Roads Funding for Railroad Crossings;
- (5) Federal Topics Program;
- (6) Parking Restrictions;
- (7) Subdivision Regulations;
- (8) Urban Renewal;
- (9) Special Assessments; and
- (10) Public Improvements Program.

Local Leadership

Decherd's Major Thoroughfare and Transportation Plan cannot be implemented without strong local leadership. The City's planning commission, government officials and interested citizens must provide aggressive and continuous leadership supporting the objectives of the Plan.

Tennessee State Highway Department

Construction or improvement of highways which are designated as Federal aid primary or secondary are made by the Tennessee State Highway Department with State and Federal funds. Most of Decherd's existing thoroughfares have been designated in the Federal aid system and qualify for this funding. If the new thoroughfares which have been proposed in this Plan are also designated in the Federal aid system, they will be constructed entirely or partially with State and Federal funds.

Gasoline Tax Rebates

State gasoline tax rebates are an important source of funds for improving City streets. They are refunded to the City on a per capita basis and are earmarked for street improvements. These funds will continue to increase as Decherd's population increases in the future.

Bureau of Public Roads Funding for Railroad Crossings

The Bureau of Public Roads administers a program of 90 percent Federal funding for the improvement of railroad crossings on Federal aid highways. The remaining 10 percent of the improvement cost is paid by the railroad company involved. Railroad crossing improvements projects under this program must be initiated through the State Highway Department.

Federal Topics Program

Section 10 of the Federal-Aid Highway Act of 1968 authorizes a program known as "Traffic Operation Programs to Improve Capacity and Safety" (TOPICS). This program provides 50 percent Federal financing for studying and improving local street systems. These improvements may include: (1) minor right-of-way and street widening to eliminate off-sets and provide continuity; (2) improvement of railroad crossings; (3) improved channelization and signalization; and (4) other such immediate improvements.

Parking Restrictions

One method of increasing the vehicular capacity of an existing street is to eliminate curb parking. In some cases, this will allow sufficient pavement width for another lane of moving traffic in each direction, and in all cases the capacity will be increased by the elimination of interruptions to the traffic flow by vehicles intering and leaving curb parking spaces. Parking restrictions are necessary only on certain portions along a thoroughfare route where the traffic volume is particularly heavy and exceeds the existing practical capacity. Usually, it is only necessary to impose parking restrictions during peak traffic hours. For example, parking could be prohibited where necessary on the inbound sides of thoroughfares between

7:00 a.m. and 9:00 a.m., and on the outbound sides between 4:00 p.m. and 6:00 p.m. If curb parking is eliminated in business areas, additional off-street parking spaces should be provided to compensate for the loss of on-street parking.

Subdivision Regulations

A Subdivision Ordinance or Regulations can be adopted which may require the subdivider to dedicate the necessary right-of-way for any proposed thoroughfares in the Major Thoroughfare Plan which fall within his subdivision. This legal tool, if properly enforced, will eliminate acquisition costs for rights-of-way in areas of new development.

Urban Renewal

In areas of the City which can qualify for an urban renewal project, it is possible to acquire property, clear substandard buildings, and provide adequate street facilities under the Urban Renewal Program. The Federal government funds 75 percent of the net cost of the total urban renewal project, and the street improvements are usually counted as part of the City's 25 percent of the net cost. This method is particularly effective in areas near the center City where thoroughfares are most congested and acquisition costs for additional rights-of-way are highest.

Special Assessments

Many communities partially finance the cost of improving local streets by means of special assessments. The property owners whose property fronts on the street are assessed on the basis of the increase in their property values which will be due to the improvement of the street. The City should be careful to see that the property owners are not assessed more than they benefit from the improvement.

Public Improvements Program

The Public Improvements Program is an implementation schedule for necessary improvements which provides for the allocations of available funds

to projects in order of priority based on need. The improvements recommended in Decherd's Major Thoroughfare and Transportation Plan which will require City financing should be included in this program. This will be necessary for streets which: (1) are not part of the Federal aid system; (2) are not in areas which can qualify for urban renewal; (3) will not be in new subdivisions; and (4) cannot be financed by special assessments.